

New Directions in Stormwater Management and Financing

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- State and Local Developments in Stormwater Financing
- The Argument For Source Controls.
- Incentive-Based Regulation and Source Control.
- Stormwater Fee-Credits and Subsidy Actions.

Orange County Considering Utility?

- ◆ Storm water Utility Fee ?
 - ◆ No detailed staff work.
 - ◆ Uncertain which jurisdictions.
- ◆ Orange County Polling:
 - ◆ 64.9 % would pay some amount
 - ◆ 59.3 % would pay \$5/m onth
 - ◆ Los Angeles Fee \$28/m onth

No Floor Votes for Legislative Funding Bills

- ◆ ACA 10
 - ◆ Storm water fees proposition 18 exempt.
 - ◆ Rendered inactive by AM Harmon.
- ◆ AB .204
 - ◆ Bay area county option for \$6 registration fee.
 - ◆ Runoff mitigation grants.
 - ◆ Through committees, no floor vote.
- ◆ Driving Related Fees?
 - ◆ Registration fees
 - ◆ Gas taxes.

Proposition 218 Case R einforces "V oluntariness" idea.

'Property-related service" means a public service having a direct relationship to property ownership.

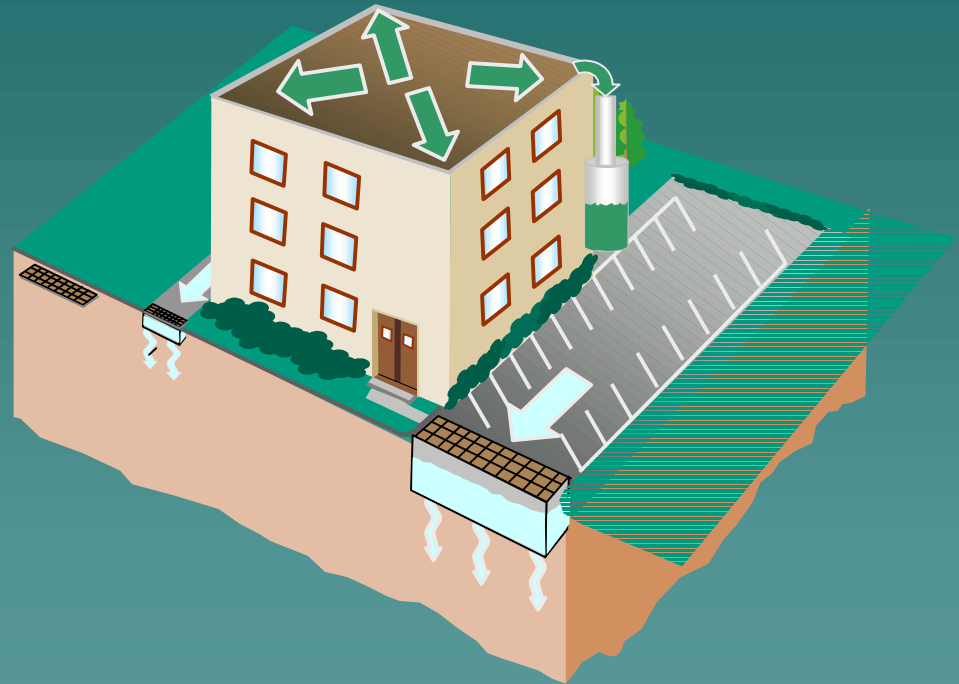
- ◆ *Apartment Association of Los Angeles County* (2001)
- ◆ *Salinas*
- ◆ *Richmond*
- ◆ Test: A void w ithout selling property?
- ◆ Storm w ater fees are property related.
- ◆ Appellate decision.
- ◆ W ater connection charges.
- ◆ Not property related if contingent on voluntarily seeking service.

Local Bond Financing Moves Forward

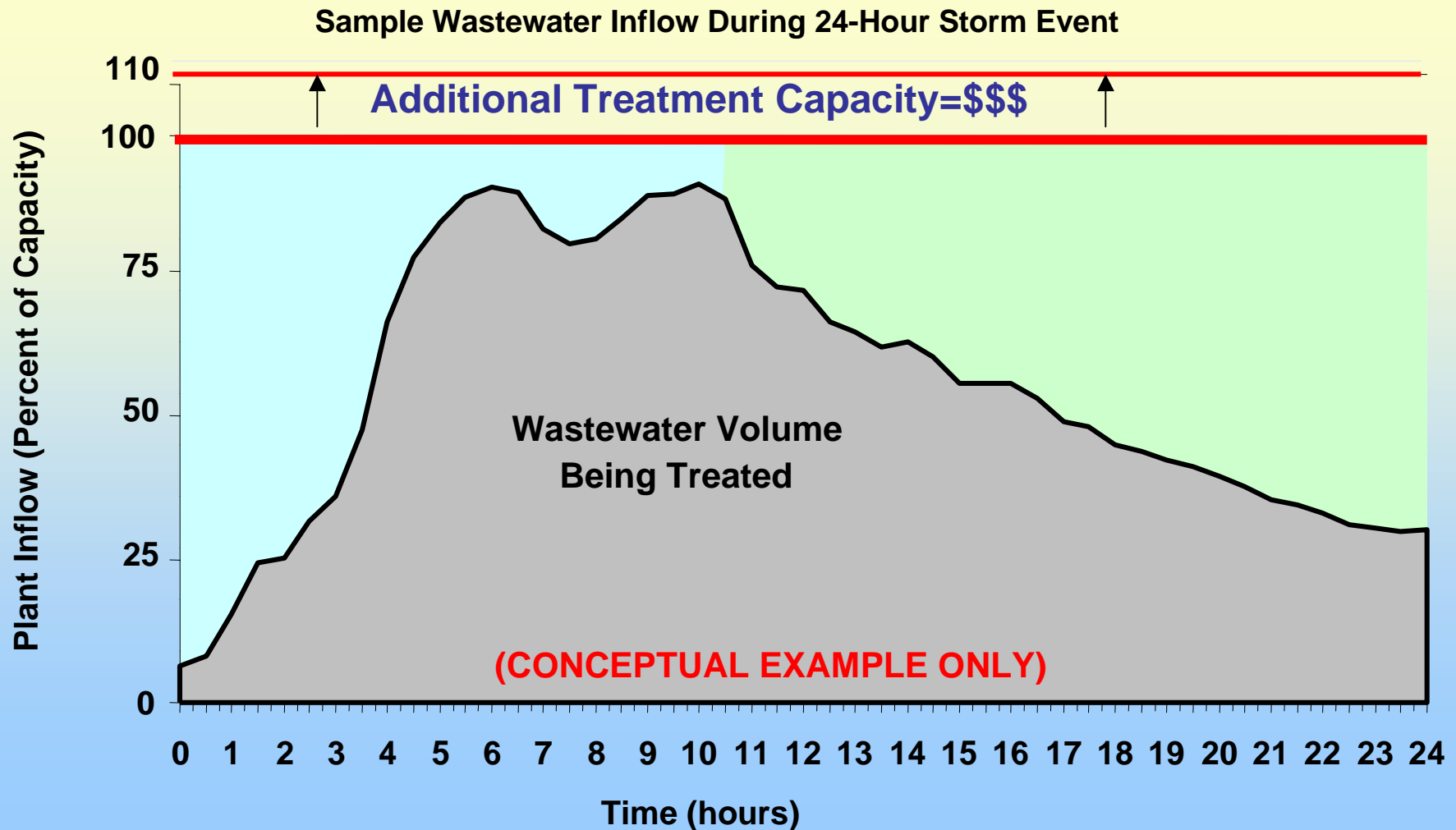
- Los Angeles City will vote on \$500 million bond.
- 2/3 vote required for passage.
- Owner of a \$350,000 home would pay approximately \$56/year.

R unoffC ontrolO ptions

- ◆ Regional Solutions
 - ◆ D iversion
 - ◆ Storage
 - ◆ Treatm ent
- ◆ Source controls
 - ◆ Capture.
 - ◆ Infiltration
 - ◆ Reuse



Source vs. Regional Tradeoff.



Source Control

◆ Cisterns



◆ Infiltration Trenches



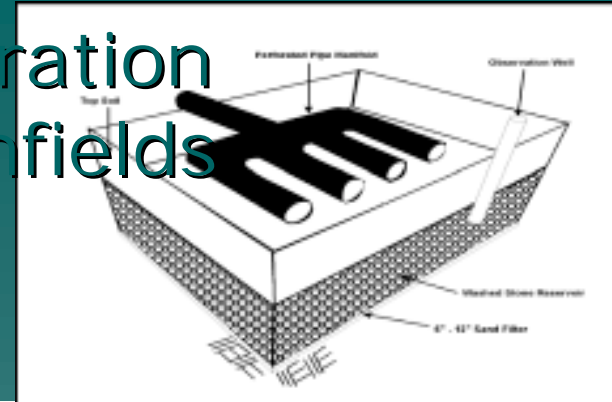
◆ Dry Wells



◆ Porous Pavement



◆ Infiltration Drainfields



◆ Vegetated Swales (Grassed Channels)



◆ Vegetated Filter Strips



Advantages to On-Site Control

◆ Cost

- ◆ Cincinnati study savings \$3.40/cubic foot

- ◆ Land, regulatory, treatment costs greater here.

◆ Flexibility

- ◆ TMDL strategies uncertain.

- ◆ Low fixed costs.

◆ Visibility

- ◆ Projects in neighborhoods.

- ◆ Environmental amenities.

Building and Zoning Codes and Construction Regulation

Pros

- ◆ Low public costs.
- ◆ Can target problematic land-uses.

Cons

- ◆ Low proportion new /redevelopment.
- ◆ Difficult to apply to existing development.
- ◆ May not target low-cost options.



Current practice of regulation on new /redevelopment and problem land uses is probably the best use of this strategy

Why Incentive-Based Regulation

◆ Runoff Control "Market"

- Set "Price" of runoff.
- Allow service users to freely respond to price.

◆ Known costs

- Standard construction.
- Maintenance.

◆ Unknown costs

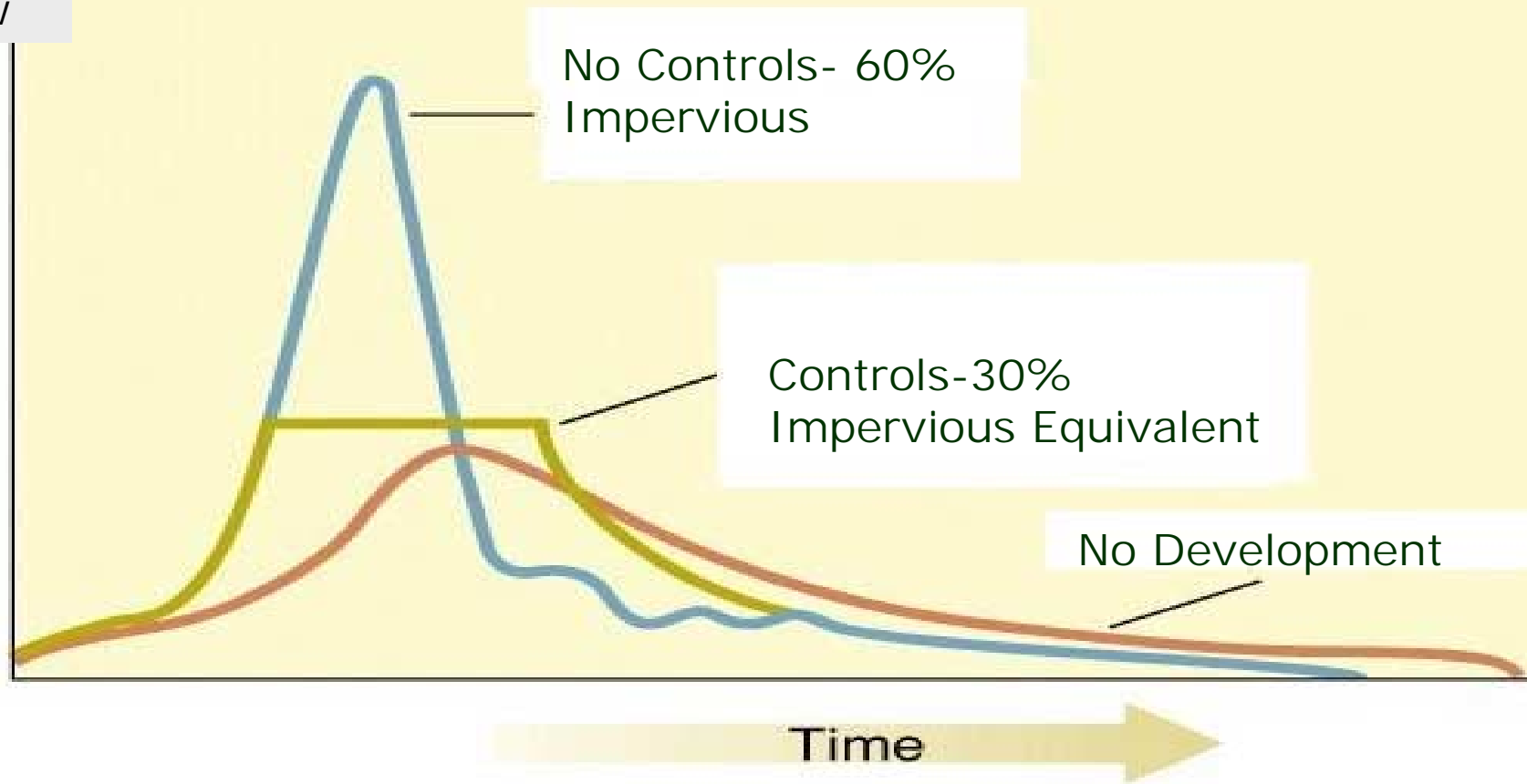
- Owner's land valuation.
- Aesthetic value or cost.
- Tremendous variation over lots.

Owners' Valuation of Lot Sub Areas

Storm water Fee Credit Example

- ◆ Credit Categories
 - ◆ 50% Peak Volume.
 - ◆ 25 % each Runoff Volume, Pollutants.
- ◆ 50 \$ fee
- ◆ Effective Impervious Credit
 - ◆ Maximum \$25 peak credit, etc.
 - ◆ Price is wrong.
 - ◆ Price per gallon avoided of peak or total runoff should be the same within a geographic area.

Runoff
Flow



Credit = $1 - \frac{\text{Equivalent Impervious}}{\text{No Control Impervious}}$
= 50% of available peak credit.

Storm water Fee Credits for Source Control.

Pros

- ◆ Enhances public acceptance
- ◆ Easy to administer
- ◆ Legal Benefits
- ◆ Some on-site control

Cons

- ◆ Small monetary incentive.
- ◆ Difficult to target:
 - Land uses.
 - Geographic areas.

Storm water BMP Auctions

◆ Subsidy Auctions

- Low bids win.
- Limited period.
- Maintenance easement.
- Forfeit if fail to perform.

◆ Cost

- Set-up costs.
- Direct costs.

Subsidy auctions extend the fee-credit concept.

Storm water Subsidy Auctions Pros and Cons

Pros

- ◆ Bidding sets a market price.
- ◆ Target specific land uses and geography.
- ◆ Incentive-based advantages.

Cons

- ◆ Setup of bid-system .
- ◆ Careful design of pricing curve.
- ◆ Maintenance and penalties for non-fulfillment.

Conclusions

- 2/3 Vote on Stormwater Specific Local Financing Options
- Legislative Financing Options Possible but Lack Support.
- Source Control Has Advantages in an Uncertain Regulatory Environment.
- Incentive-Based Source Control Could Be More Cost-Effective.